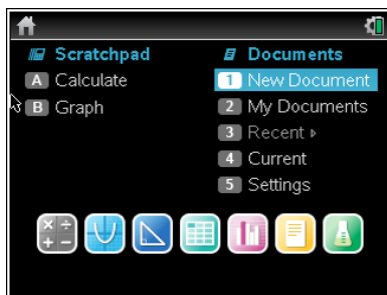


A P S T A T I S T I C S

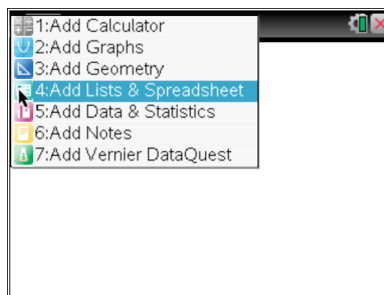
TI-*nspire* **CX** *Calculator Skills*



Entering Data Lists



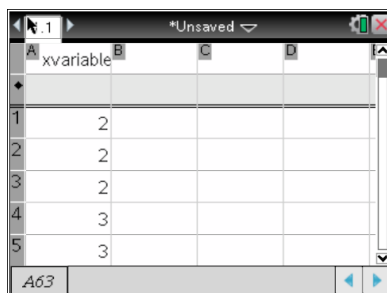
1. Open a New Document or use scratchpad 'A'



2. Add Lists & Spreadsheet

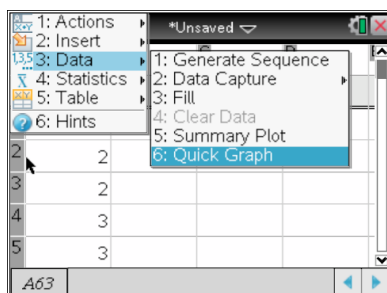


3. Name the data list. Use 'name' for categorical data

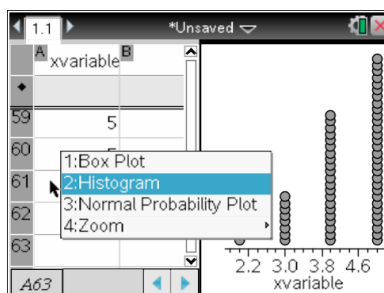


4. Input the data

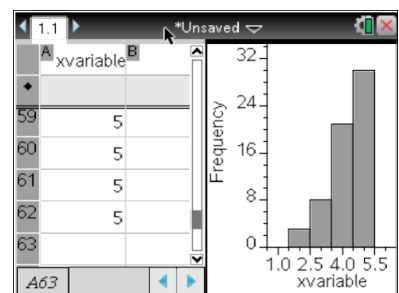
Creating a Single Histogram / Boxplot (Quantitative Data)



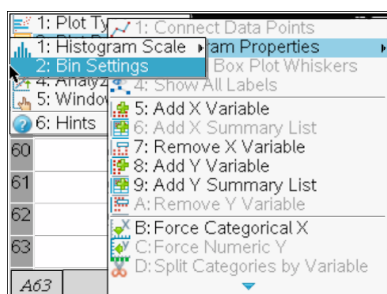
1. Menu: Data: Quick Graph



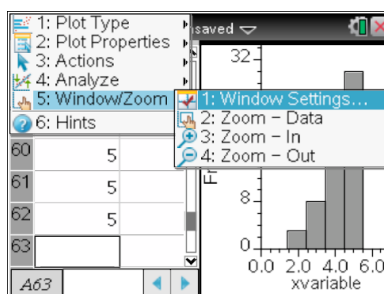
2. Right-click (Ctrl Menu): Histogram (Boxplot could be created at this stage)



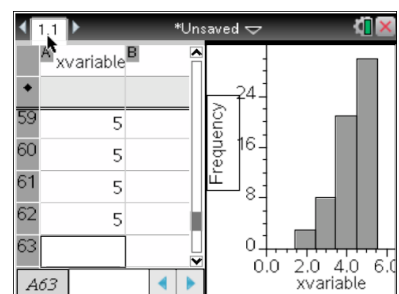
3. Adjust bin width by click and dragging a bar or..



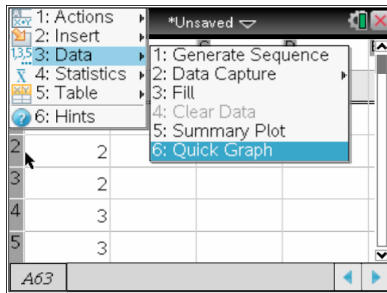
4. Click in graph: menu: Plot Properties: Histogram Properties: Bin Settings



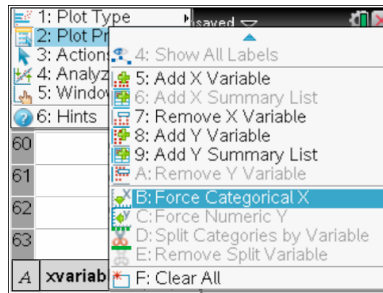
5. Adjust x-axis scale by clicking graph: menu: Window/Zoom



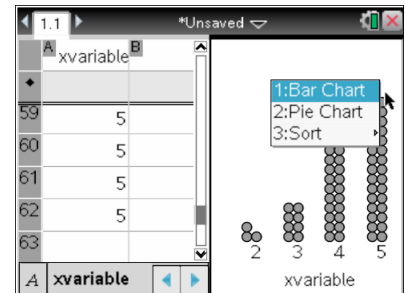
Creating a Single Bar Chart (Categorical Data)



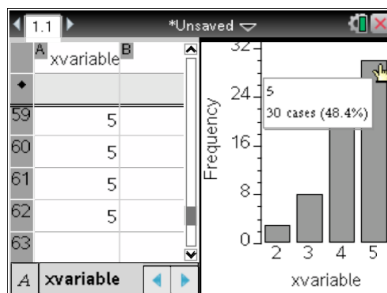
1. Menu: Data: Quick Graph



2. Menu: Plot Properties:
Force Categorical X



3. Click in graph: Right-click:
Bar Chart



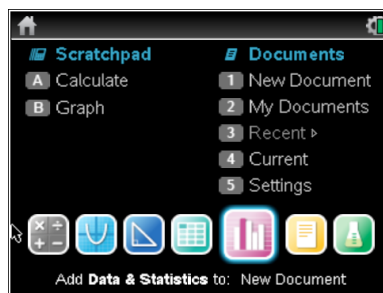
4. Trace over bars for details

Creating Multiple Boxplots / Histograms

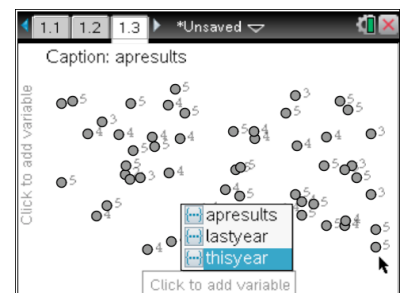
A screenshot of a data table in a software application. The table has two columns: 'thisyear' and 'lastyear'. The data is as follows:

| | thisyear | lastyear |
|---|----------|----------|
| 1 | 2 | 1 |
| 2 | 2 | 2 |
| 3 | 2 | 3 |
| 4 | 3 | 3 |
| 5 | 3 | 3 |

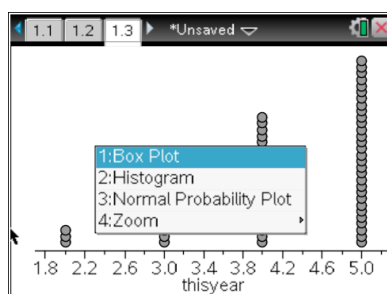
1. Begin with named data list(s)



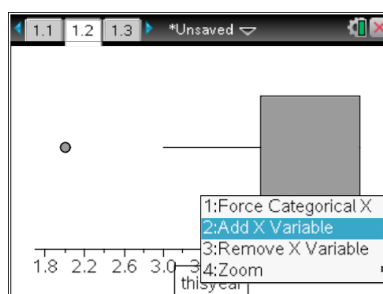
2. Home: Add Data & Stats



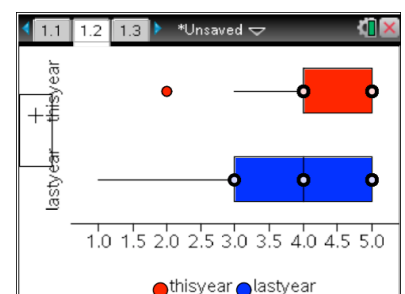
3. Click and add variable



4. Click in graph: Right click: Box Plot
(Histogram could be created at this stage)

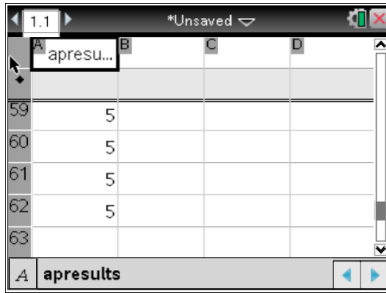


5. Click and add variable for more than
one boxplot

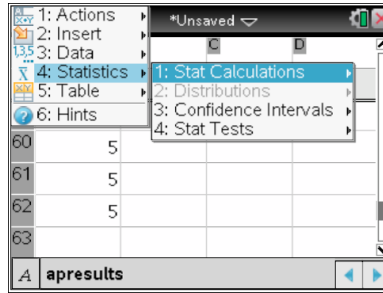


6. Color can be added by right-clicking
in each boxplot

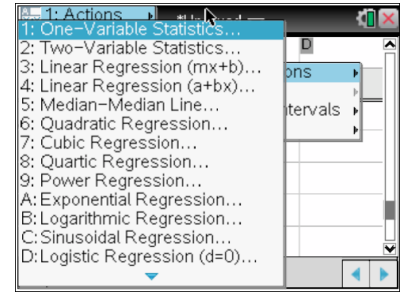
Obtaining Summary Statistics



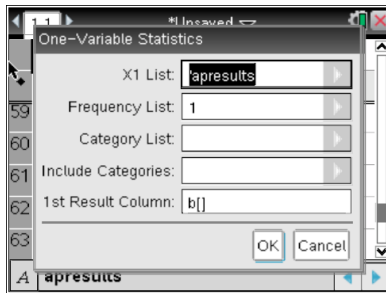
1. Begin with named data list



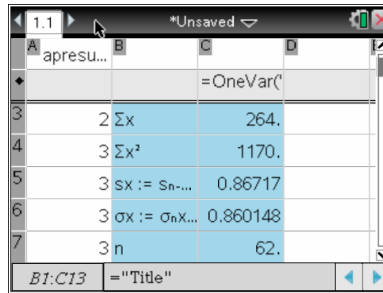
2. Menu: Statistics: Stats Calculations



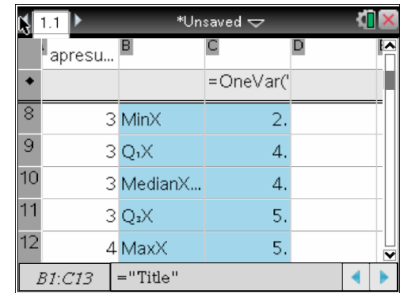
3. One-Variable Statistics



4. Choose list

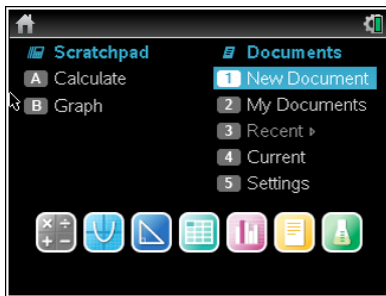


5. Scroll to top of list to view summary statistics

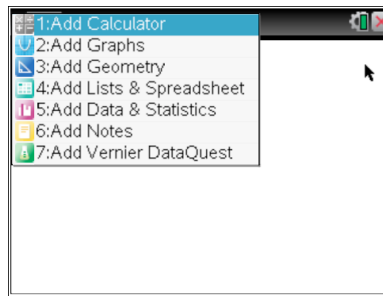


6. Scroll down list to view '5-number summary'

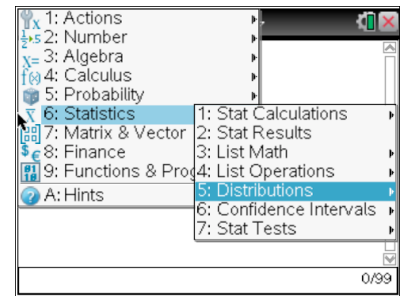
The Normal Distribution: Area Under A Normal Curve (Calculating Probability Between Two Boundaries)



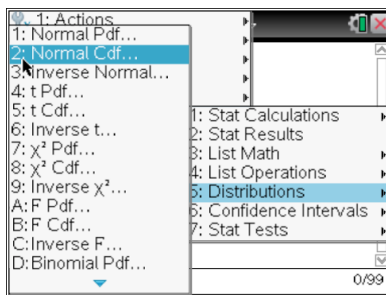
1. Open a New Document or use scratchpad 'A'



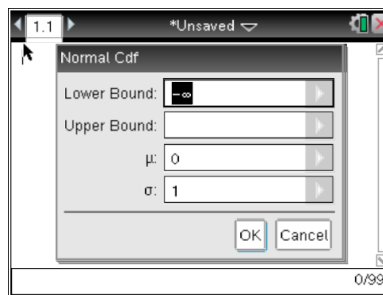
2. Add Calculator



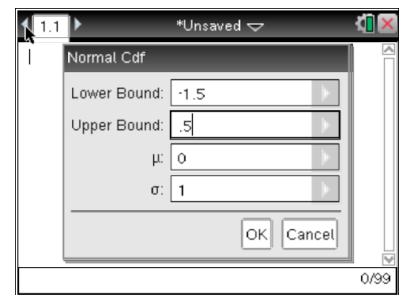
3. Menu: Statistics:
Distributions



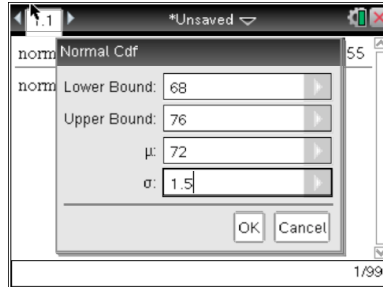
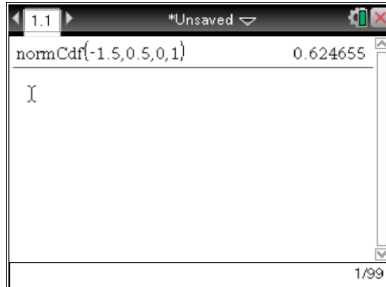
4. Normal CDF



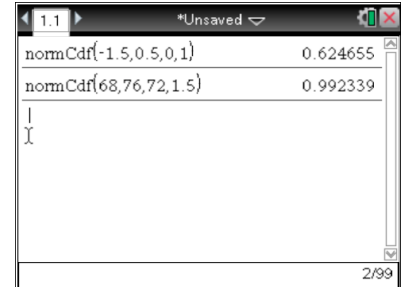
5. Enter Lower and Upper Bounds.



6. If using 'z-scores' leave $\mu = 0$
and $\sigma = 1$

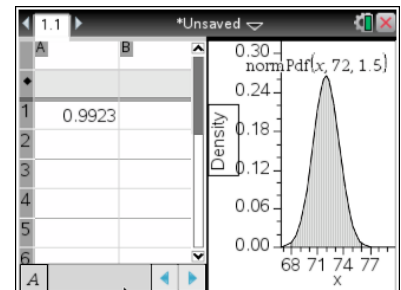
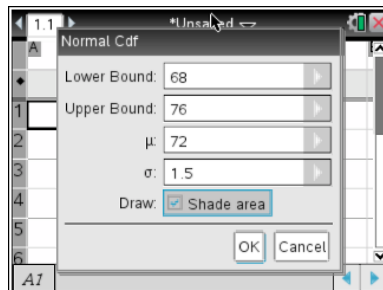


7. If calculating directly, input μ and σ

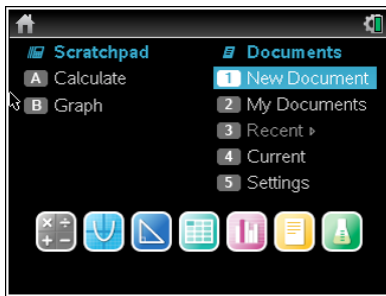


* To obtain a graph of the Distribution, perform the required calculation on a "List & Spreadsheets" page instead of a "Calculator" page.

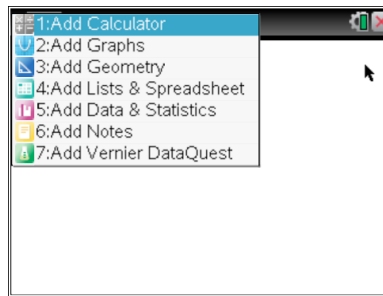
Check the "Shade Area" box.



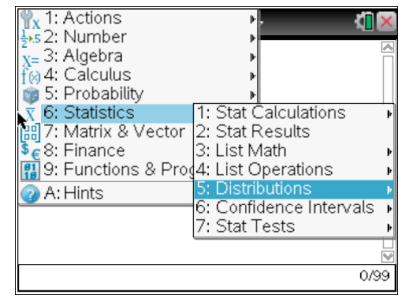
The Normal Distribution: Inverse Normal (Calculating Percentiles Given Probability)



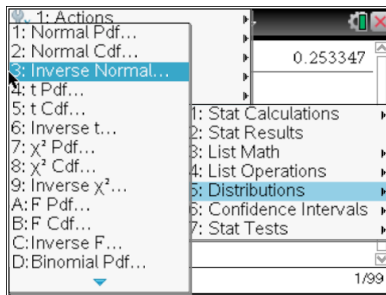
1. Open a New Document or use scratchpad 'A'



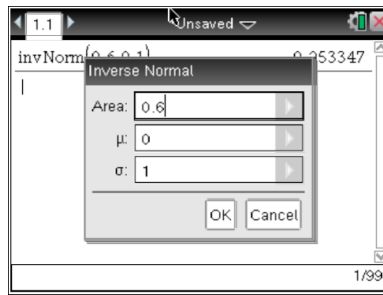
2. Add Calculator



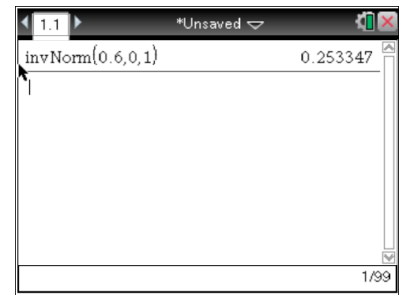
3. Menu: Statistics: Distributions



4. Inverse Normal

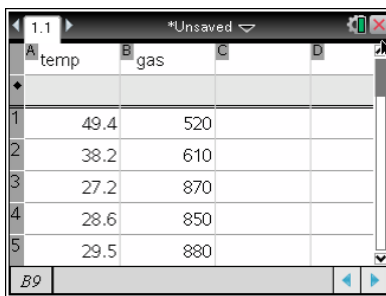


5. Enter Area (Probability)
(and μ & σ if necessary)



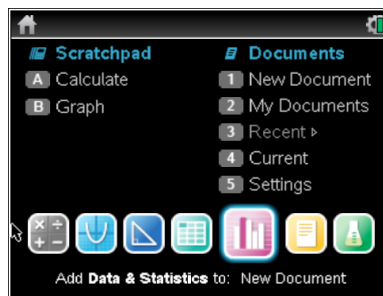
Note that **Area is always measured from the extreme left-hand side.**

Bivariate Data: Producing a Scatter Plot

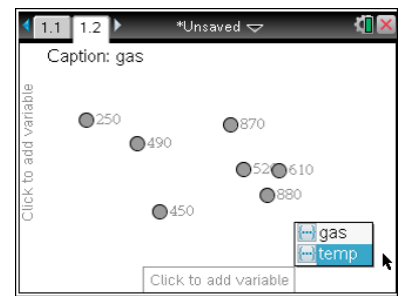


| | temp | gas |
|---|------|-----|
| 1 | 49.4 | 520 |
| 2 | 38.2 | 610 |
| 3 | 27.2 | 870 |
| 4 | 28.6 | 850 |
| 5 | 29.5 | 880 |

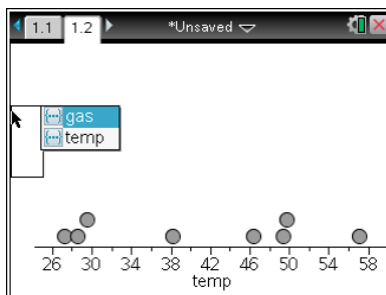
1. Begin with named data lists



2. Home: Add Data & Stats

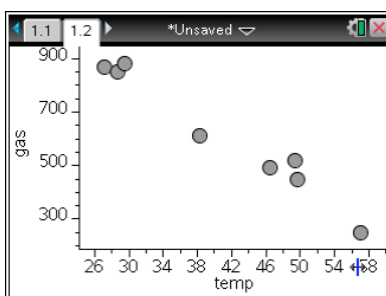


3. Click and add x-variable

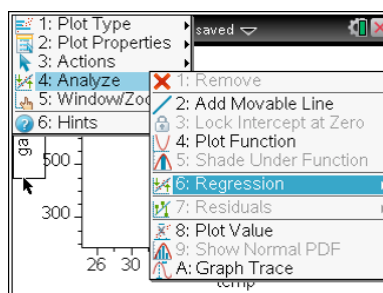


4. Click and add y-variable

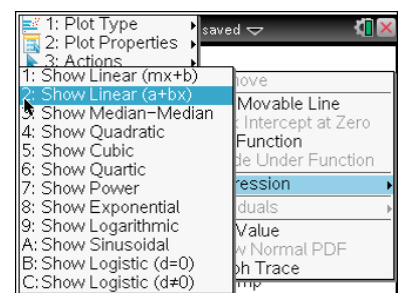
Bivariate Data: Graphing Least-Squares Regression Line



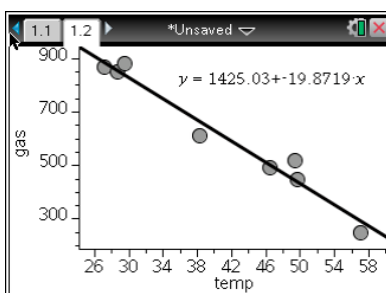
1. Begin with scatterplot



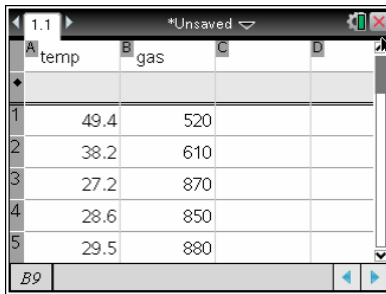
2. Menu: Analyze: Regression



3. Show Linear (a+bx)

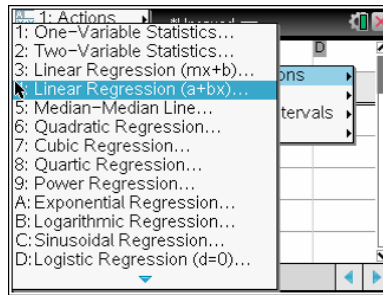


Bivariate Data: Linear Regression

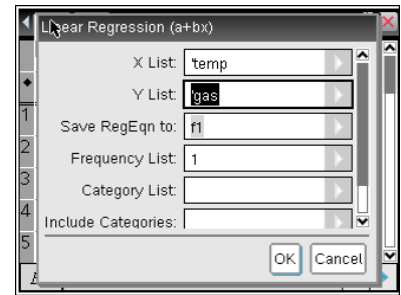


| | temp | gas |
|---|------|-----|
| 1 | 49.4 | 520 |
| 2 | 38.2 | 610 |
| 3 | 27.2 | 870 |
| 4 | 28.6 | 850 |
| 5 | 29.5 | 880 |

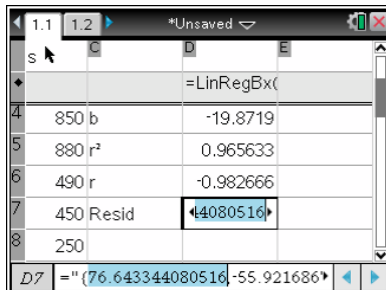
1. Begin with named data lists



2. Menu: Stat Calculations:
Linear Regression (a+bx)



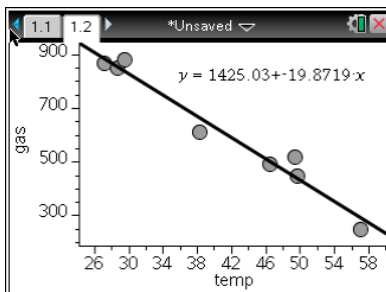
3. Enter appropriate x and y variables



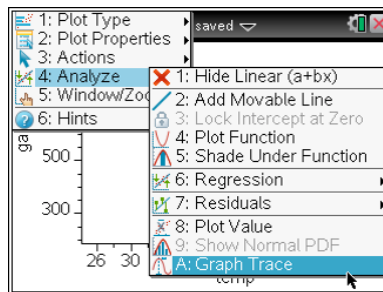
| | temp | gas |
|---|------|-----|
| 1 | 49.4 | 520 |
| 2 | 38.2 | 610 |
| 3 | 27.2 | 870 |
| 4 | 28.6 | 850 |
| 5 | 29.5 | 880 |
| 6 | | |
| 7 | | |
| 8 | | |

4. Scroll down to access r , r^2 , and residuals

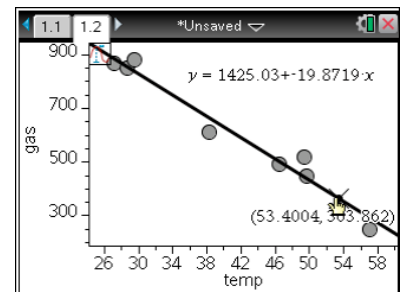
Bivariate Data: Interpolating Data



1. Begin with Scatterplot with linear regression

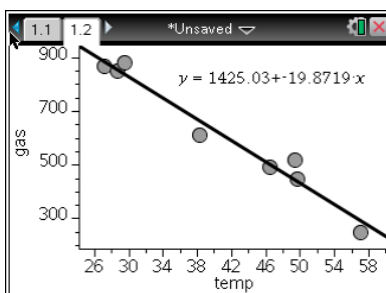


2. Menu: Analyze: Graph Trace

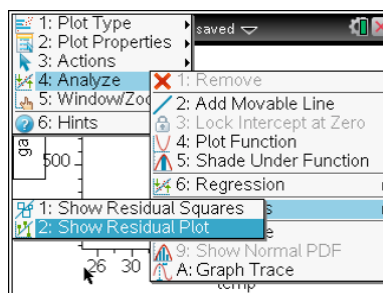


3. Move pointer along graph to interpolate

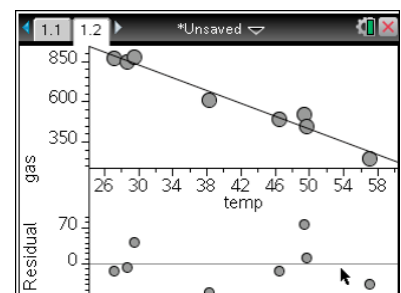
Bivariate Data: Producing a Residual Plot



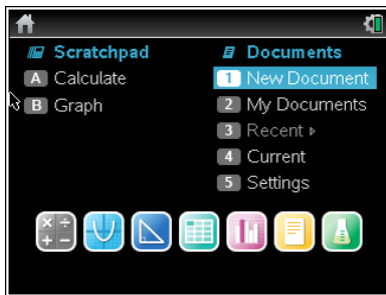
1. Begin with a Scatterplot with linear regression previously calculated on the 'Lists & Spreadsheets' page



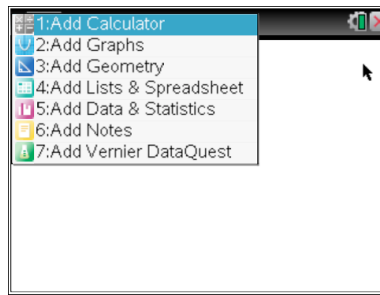
2. Menu: Analyze: Residuals:
Show Residual Plot



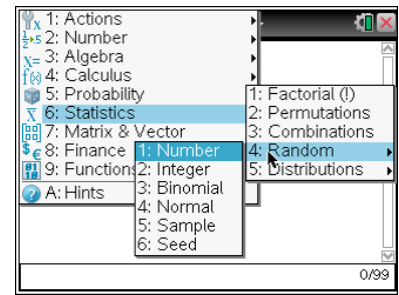
Generating Random Numbers



1. Open a New Document or use scratchpad 'A'



2. Add Calculator



3. Menu: Statistics: Random Number: Enter

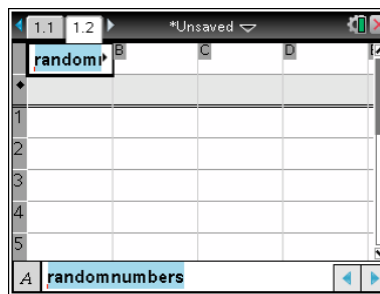


4. Repeat "Enter" for a new random number

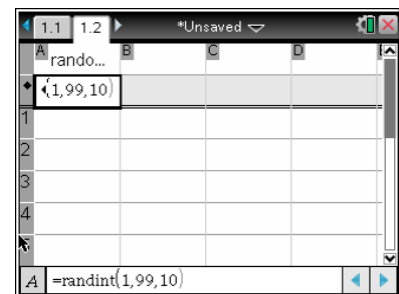
Creating a List of Random Integers



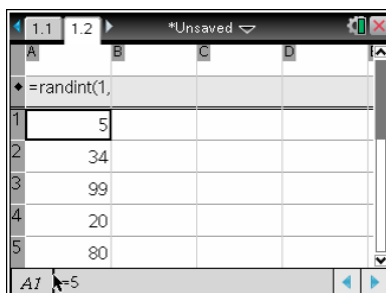
1. Home: Add Lists & Spreadsheet



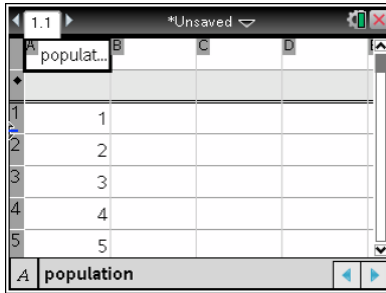
2. Name the data list.



3. Type "`=randint(low, high, # of trials)`", then Enter

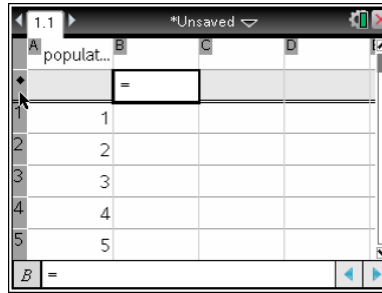


Creating a Random Sample From a List of Data



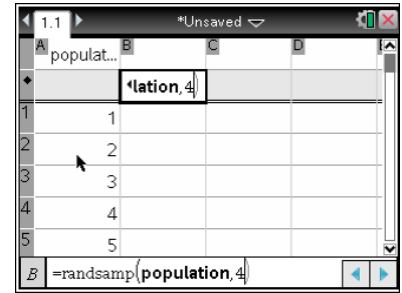
| | A | B | C | D |
|---|------------|---|---|---|
| 1 | populat... | | | |
| 2 | | 1 | | |
| 3 | | 2 | | |
| 4 | | 3 | | |
| 5 | | 4 | | |
| 6 | | 5 | | |

1. Begin with a named data list



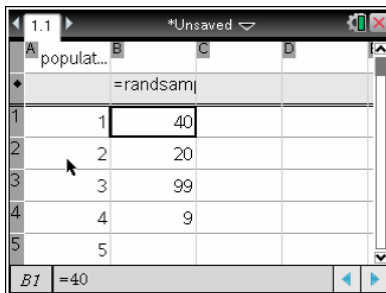
| | A | B | C | D |
|---|------------|---|---|---|
| 1 | populat... | | | |
| 2 | | 1 | | |
| 3 | | 2 | | |
| 4 | | 3 | | |
| 5 | | 4 | | |
| 6 | | 5 | | |

2. Double click in the next list formula cell



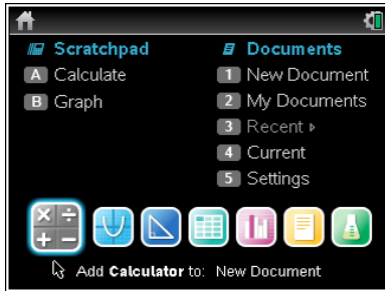
| | A | B | C | D |
|---|------------|---|---|---|
| 1 | populat... | | | |
| 2 | | 1 | | |
| 3 | | 2 | | |
| 4 | | 3 | | |
| 5 | | 4 | | |
| 6 | | 5 | | |

3. Type “=rand samp(list, # of trials)”, then Enter

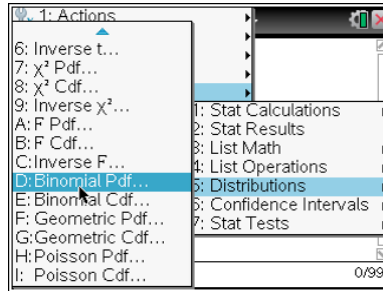


| | A | B | C | D |
|---|------------|---|----|---|
| 1 | populat... | | | |
| 2 | | 1 | 40 | |
| 3 | | 2 | 20 | |
| 4 | | 3 | 99 | |
| 5 | | 4 | 9 | |
| 6 | | 5 | | |

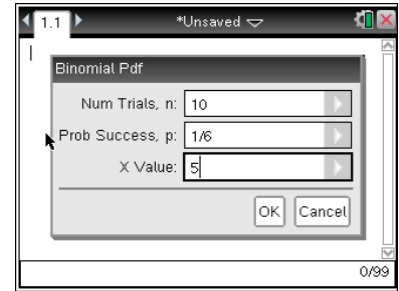
The Binomial Distribution: $P(x) = k$ (Exactly k successes)



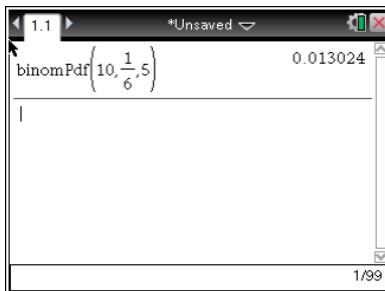
1. Home: Add Calculator



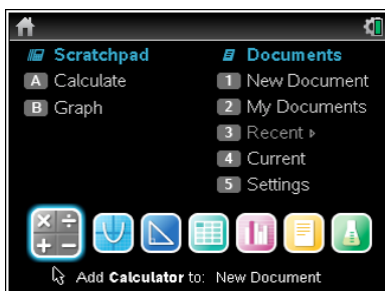
2. Menu: Probability: Distributions: BinomialPdf



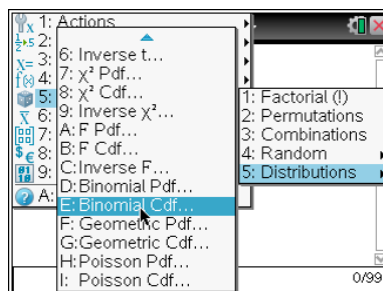
3. Input the appropriate values for problem



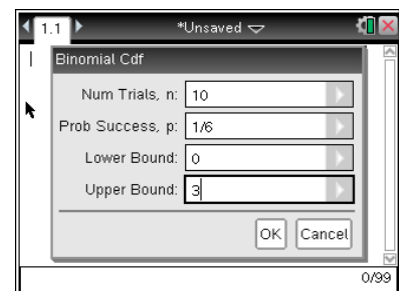
The Binomial Distribution: $P(x) \leq k$ (k or fewer successes)



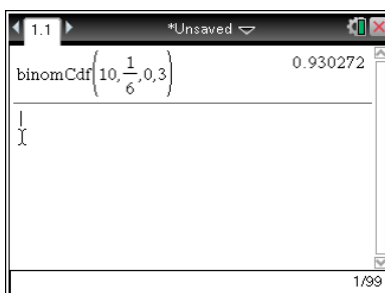
1. Home: Add Calculator



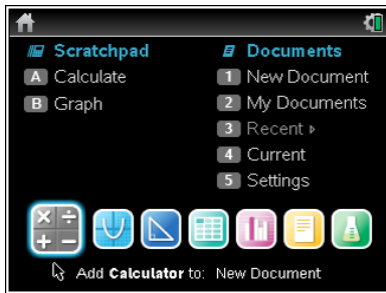
2. Menu: Probability: Distributions: BinomialCdf



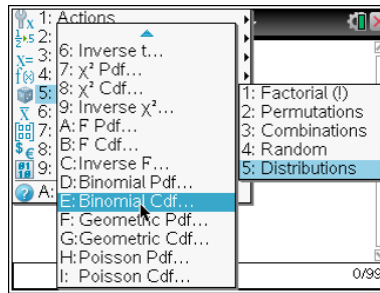
3. Input the appropriate values for problem (Lower bound = 0)



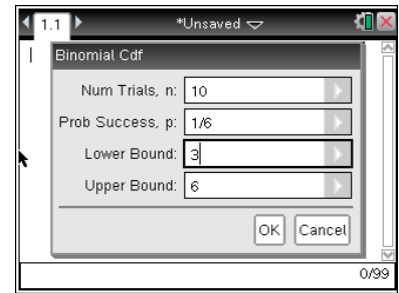
The Binomial Distribution: $k_{\text{low}} < P(x) \leq k_{\text{high}}$



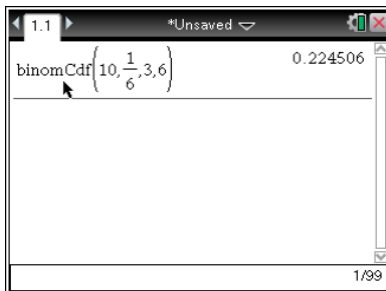
1. Home: Add Calculator



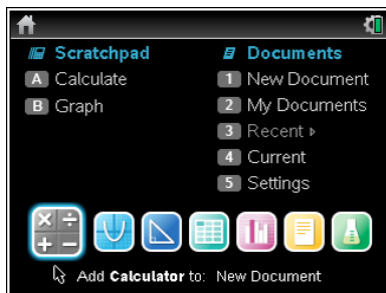
2. Menu: Probability: Distributions: BinomialCdf



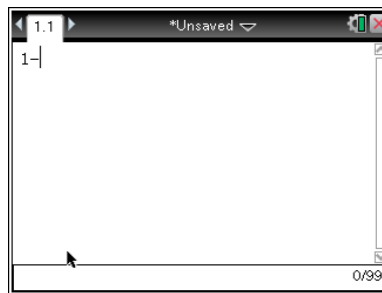
3. Input the appropriate values for problem



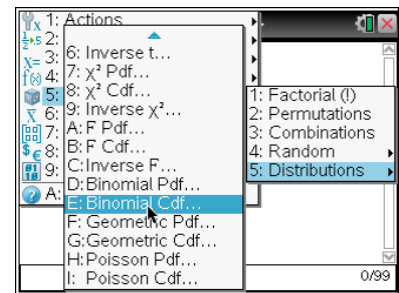
The Binomial Distribution: $P(x) > k$ (More than k successes)



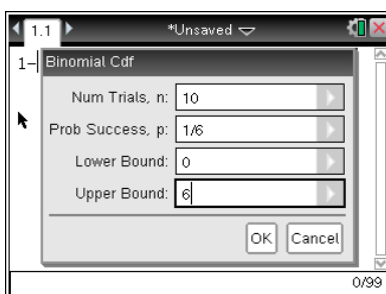
1. Home: Add Calculator



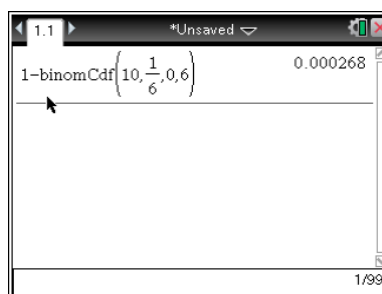
2. "1 -"



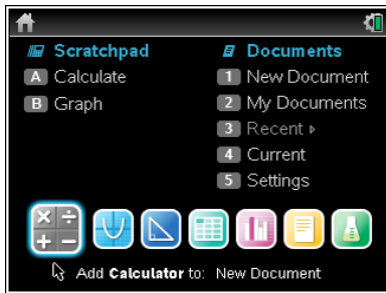
3. Menu: Probability: Distributions: BinomialCdf



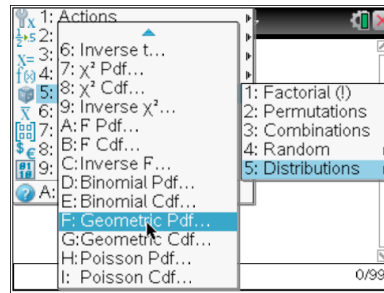
4. Input the appropriate values for problem
(Lower bound = 0)



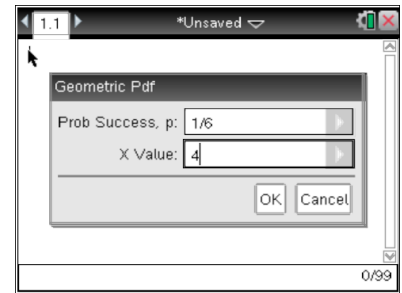
The Geometric Distribution: First Success on n th Trial



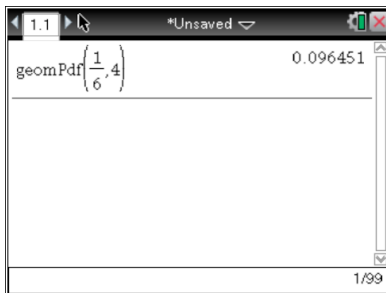
1. Home: Add Calculator



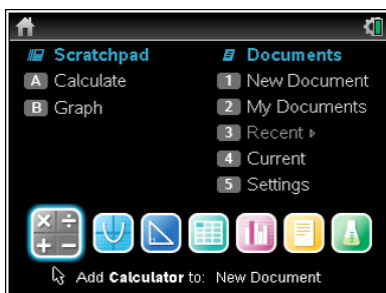
2. Menu: Probability: Distributions: GeometricPdf



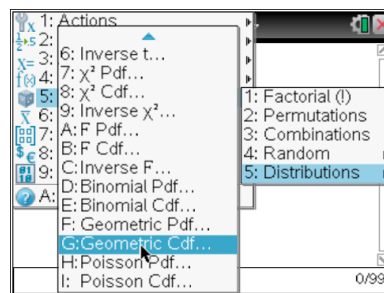
3. Input the appropriate values for problem



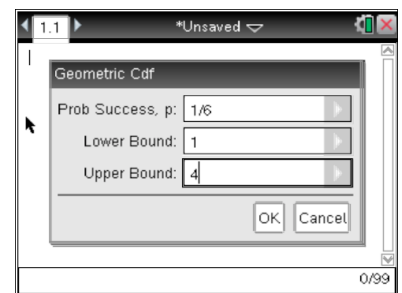
The Geometric Distribution: First Success On or Before n th Trial



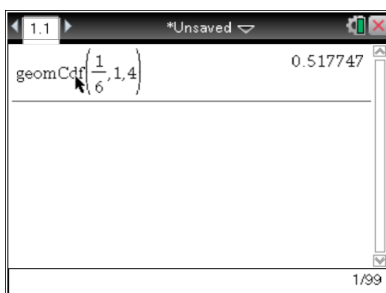
1. Home: Add Calculator



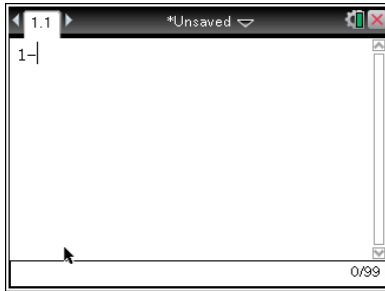
2. Menu: Probability: Distributions: GeometricCdf



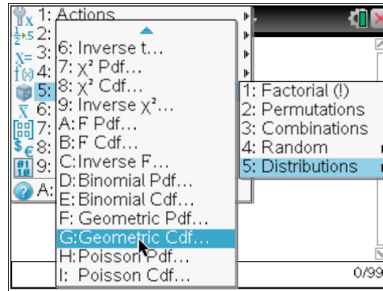
3. Input the appropriate values for problem



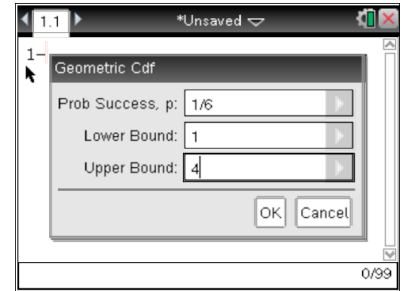
The Geometric Distribution: First Success After the n th Trial



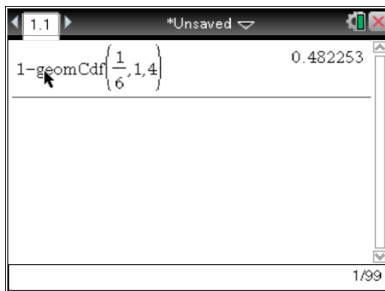
1. "1 - "



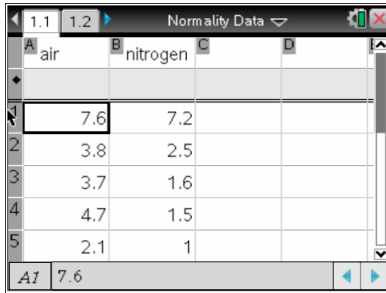
2. Menu: Probability: Distributions: GeometricCdf



3. Input the appropriate values for problem

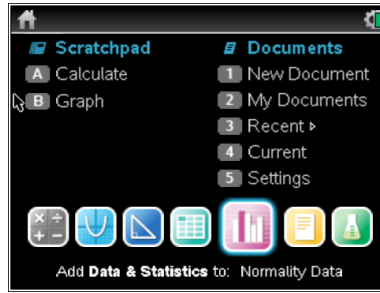


Assessing Normality of Data: Normal Probability Plot

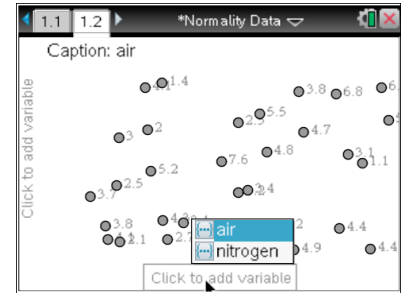


| | air | nitrogen |
|---|-----|----------|
| 1 | 7.6 | 7.2 |
| 2 | 3.8 | 2.5 |
| 3 | 3.7 | 1.6 |
| 4 | 4.7 | 1.5 |
| 5 | 2.1 | 1 |

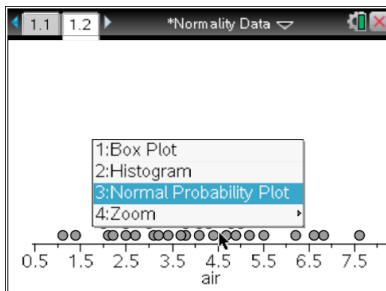
1. Begin with named data list



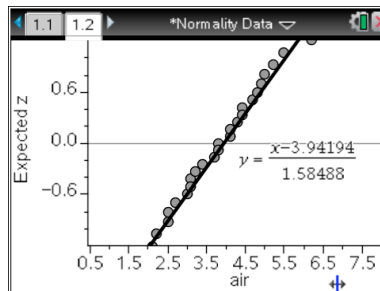
2. Home: Add Data & Statistics



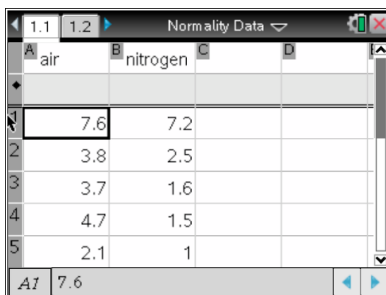
3. Click and choose variable



4. Right-click (Ctrl Menu): Normal Probability Plot

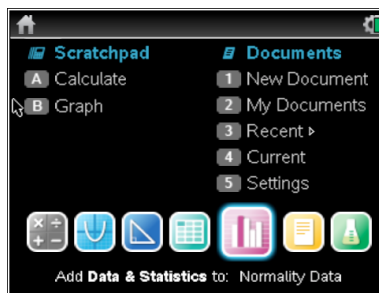


Assessing Normality of Data: Comparing Histogram with Normal Probability Density Function

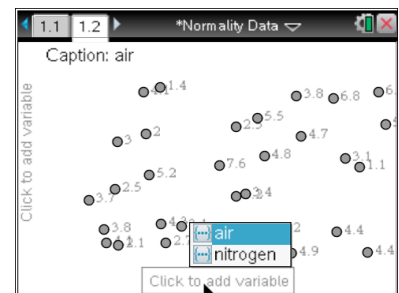


| | air | nitrogen |
|---|-----|----------|
| 1 | 7.6 | 7.2 |
| 2 | 3.8 | 2.5 |
| 3 | 3.7 | 1.6 |
| 4 | 4.7 | 1.5 |
| 5 | 2.1 | 1 |

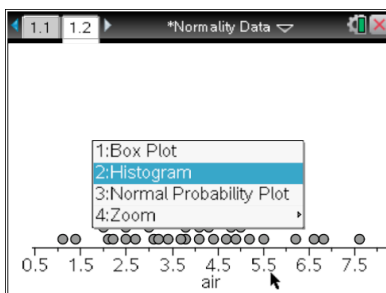
1. Begin with named data list



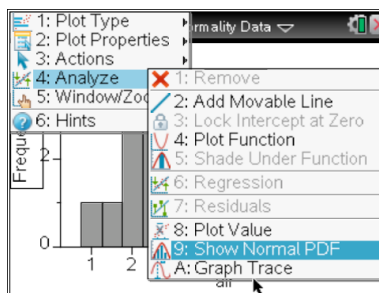
2. Home: Add Data & Statistics



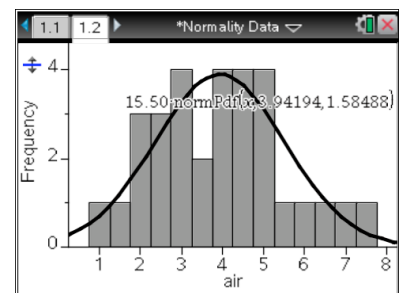
3. Click and choose variable



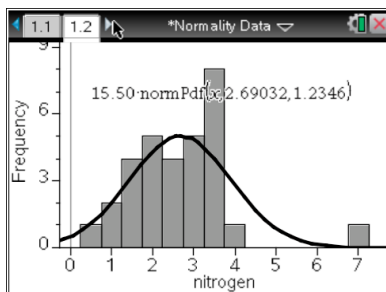
4. Right-click (Ctrl Menu):Histogram



5. Menu: Analyze: Show Normal PDF

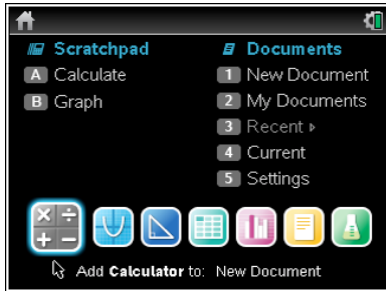


6. Overlays a normal prob. density curve based on \bar{x} and s for the given data

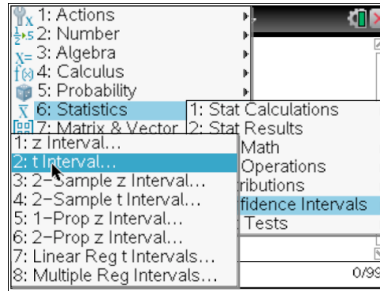


Comparison can be made to assess how 'normal' the data may be

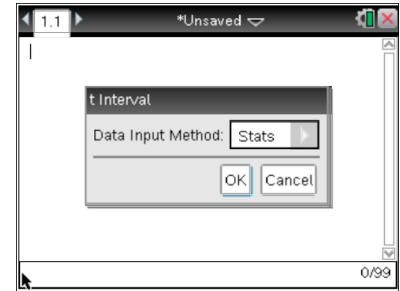
Confidence Interval For Population Mean: (Known Statistics)



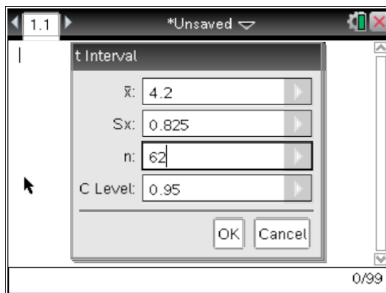
1. Home: Add Calculator: or use scratchpad 'A'



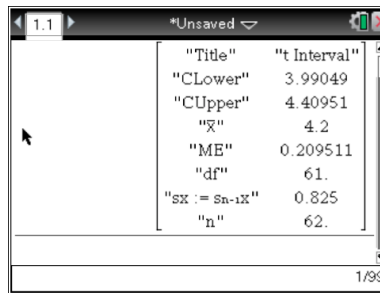
2. Menu: Statistics:
Confidence Intervals: t Interval



3. Choose 'Stats' as Data Input Method



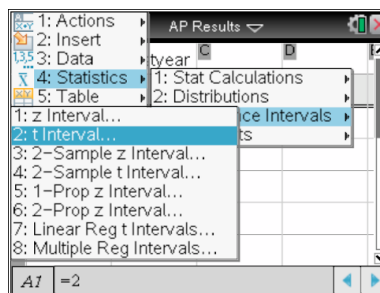
4. Enter the appropriate statistics for the problem



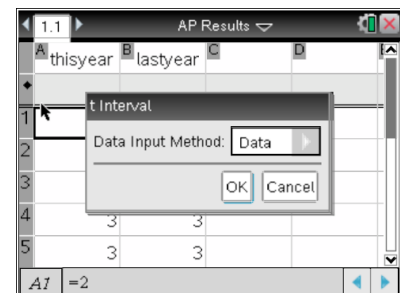
Confidence Interval For Population Mean: (From Original Data)



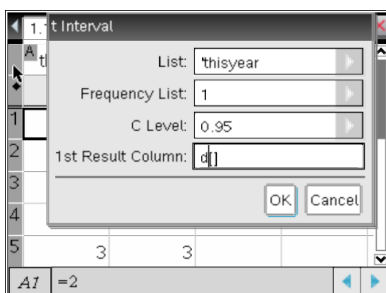
1. Home: Add Calculator: or use scratchpad 'A'



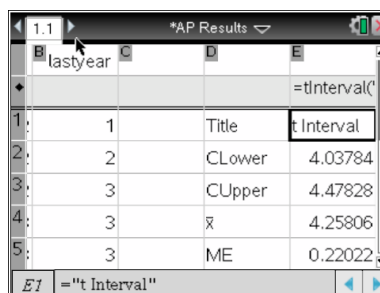
2. Menu: Statistics:
Confidence Intervals: t Interval



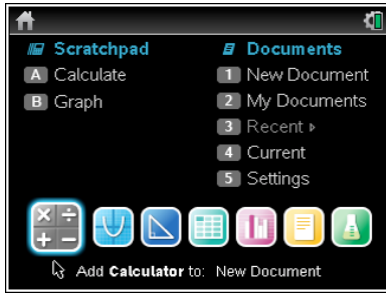
3. Choose 'Data' as Data Input Method



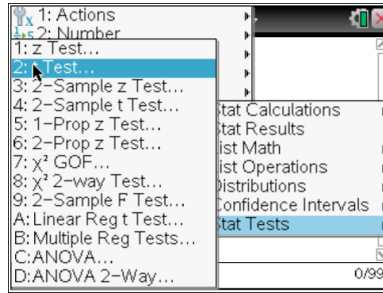
4. Enter the appropriate information for the problem



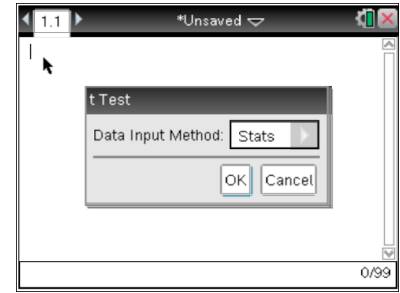
Significance Test For Population Mean: (Known Statistics)



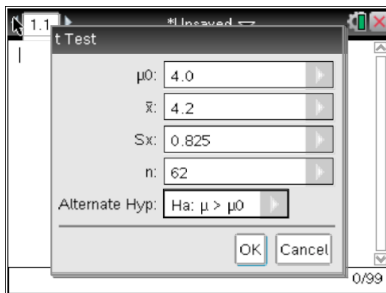
1. Home: Add Calculator: or use scratchpad 'A'



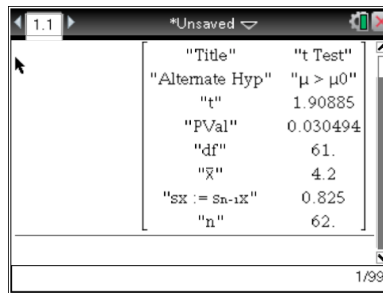
2. Menu: Statistics: Stat Tests: t Test



3. Choose 'Stats' as Data Input Method



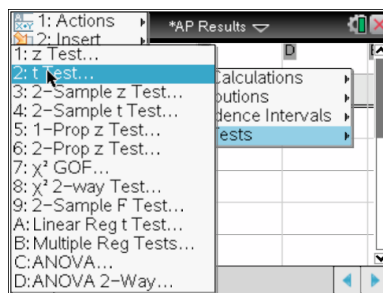
4. Enter the appropriate statistics for the problem



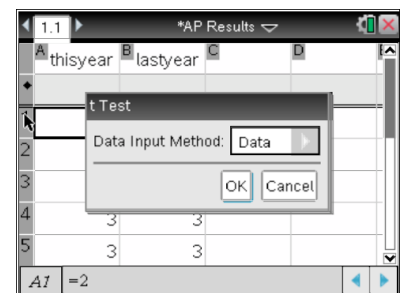
Significance Test For Population Mean: (From Original Data)



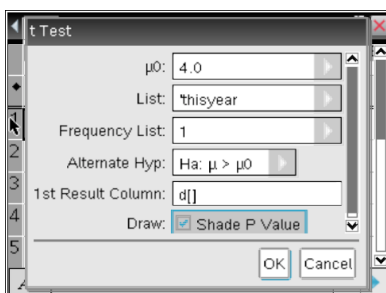
1. Begin with named list(s)



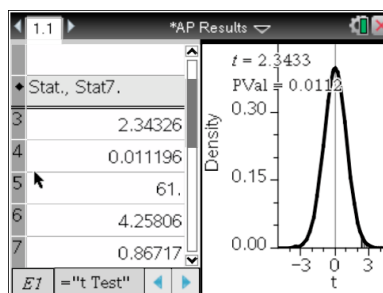
2. Menu: Statistics: Stat Tests: t Test



3. Choose 'Data' as Data Input Method



4. Enter the appropriate information.
(Click 'Shade P Value' to obtain a graph)

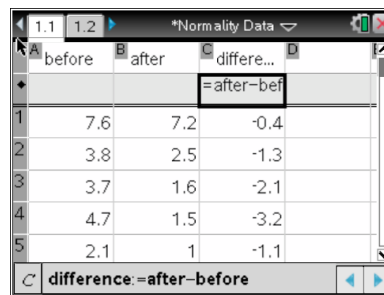


'Matched Pairs': "Mean Difference" Confidence Interval



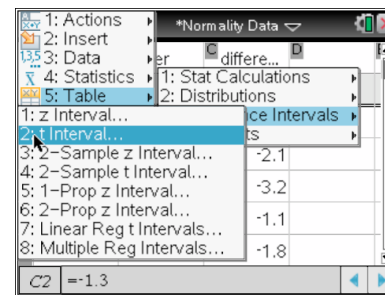
| | before | after |
|---|--------|-------|
| 1 | 7.6 | 7.2 |
| 2 | 3.8 | 2.5 |
| 3 | 3.7 | 1.6 |
| 4 | 4.7 | 1.5 |
| 5 | 2.1 | 1 |

1. Begin with named list(s)



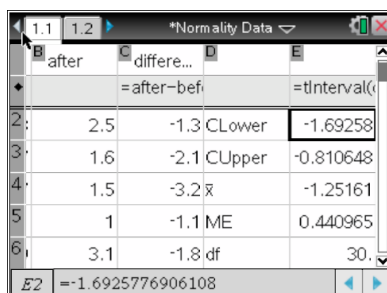
| | before | after | difference |
|---|--------|-------|------------|
| 1 | 7.6 | 7.2 | -0.4 |
| 2 | 3.8 | 2.5 | -1.3 |
| 3 | 3.7 | 1.6 | -2.1 |
| 4 | 4.7 | 1.5 | -3.2 |
| 5 | 2.1 | 1 | -1.1 |

2. Compute a third list for the **differences**



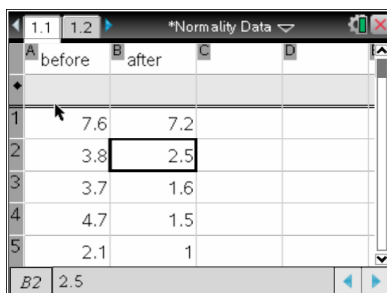
1: Actions
2: Insert
3: Data
4: Statistics
5: Table
1: z Interval...
2: t Interval...
3: 2-Sample z Interval...
4: 2-Sample t Interval...
5: 1-Prop z Interval...
6: 2-Prop z Interval...
7: Linear Reg t Intervals...
8: Multiple Reg Intervals...

3. Proceed with a **1-Sample t Interval** for the **differences**



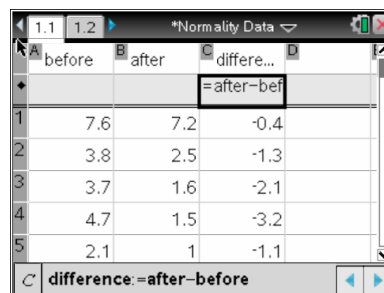
| | after | difference | CLower | CUpper |
|---|-------|---------------|-----------|-------------|
| 1 | | =after-before | | =tInterval(|
| 2 | 2.5 | -1.3 | -1.69258 | |
| 3 | 1.6 | -2.1 | -0.810648 | |
| 4 | 1.5 | -3.2 | -1.25161 | |
| 5 | 1 | -1.1 | 0.440965 | |
| 6 | 3.1 | -1.8 | df | 30 |

'Matched Pairs': "Mean Difference" Significance Test



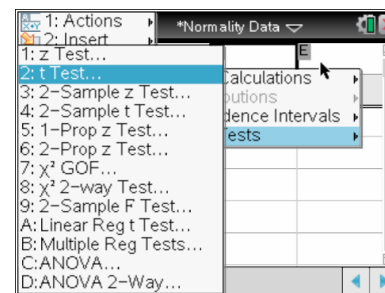
| | before | after |
|---|--------|-------|
| 1 | 7.6 | 7.2 |
| 2 | 3.8 | 2.5 |
| 3 | 3.7 | 1.6 |
| 4 | 4.7 | 1.5 |
| 5 | 2.1 | 1 |

1. Begin with named list(s)



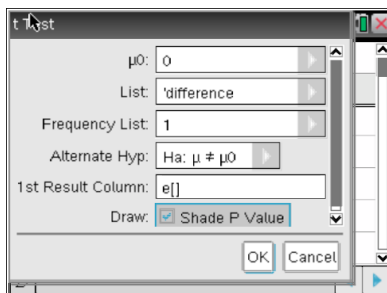
| | before | after | difference |
|---|--------|-------|------------|
| 1 | 7.6 | 7.2 | -0.4 |
| 2 | 3.8 | 2.5 | -1.3 |
| 3 | 3.7 | 1.6 | -2.1 |
| 4 | 4.7 | 1.5 | -3.2 |
| 5 | 2.1 | 1 | -1.1 |

2. Compute a third list for the **differences**



1: Actions
2: Insert
3: Data
4: Statistics
5: Table
1: z Test...
2: t Test...
3: 2-Sample z Test...
4: 2-Sample t Test...
5: 1-Prop z Test...
6: 2-Prop z Test...
7: χ^2 GOF...
8: χ^2 2-way Test...
9: 2-Sample F Test...
A: Linear Reg t Test...
B: Multiple Reg Tests...
C: ANOVA...
D: ANOVA 2-Way...

3. Proceed with a **1-Sample t Test** for the **differences**



t Test

μ_0 : 0

List: difference

Frequency List: 1

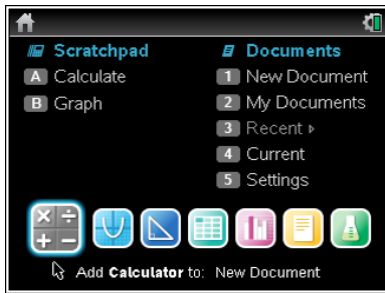
Alternate Hyp: $H_a: \mu \neq \mu_0$

1st Result Column: e[]

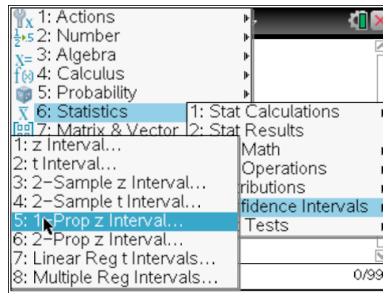
Draw: ☒ Shade P Value

OK Cancel

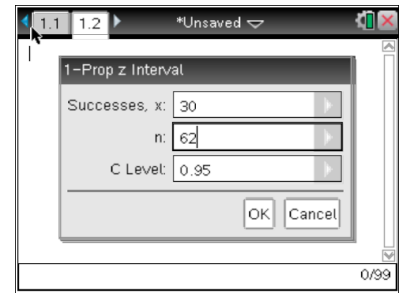
Confidence Interval For Proportions:



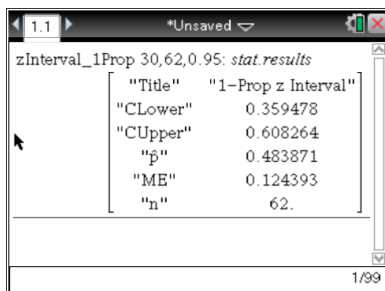
1. Home: Add Calculator: or use scratchpad 'A'



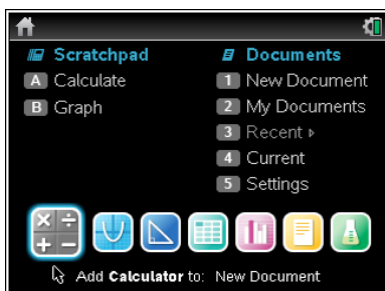
2. Menu: Statistics: Confidence Intervals: 1-Prop z Interval



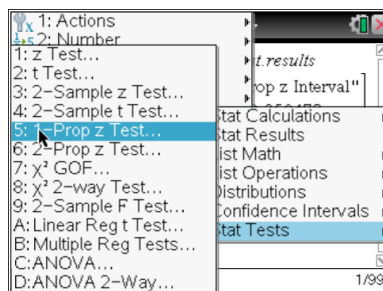
3. Enter the appropriate information for the problem



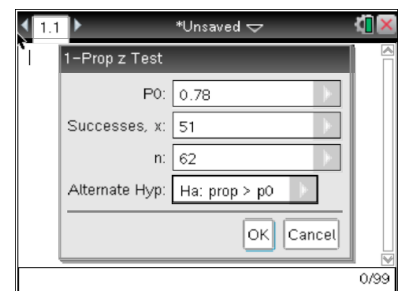
Significance Test For Proportions:



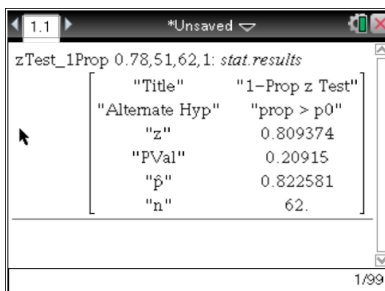
1. Home: Add Calculator: or use scratchpad 'A'



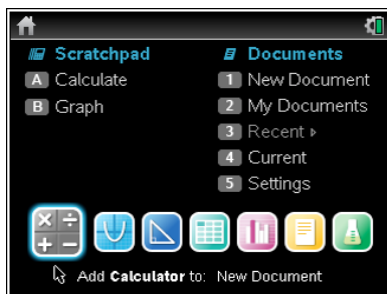
2. Menu: Statistics: Stat Tests: 1-Prop z Test



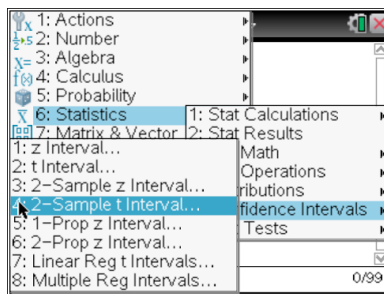
3. Enter the appropriate information for the problem



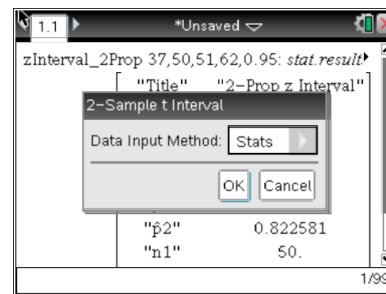
Difference of Two Means: Confidence Interval (Known Statistics)



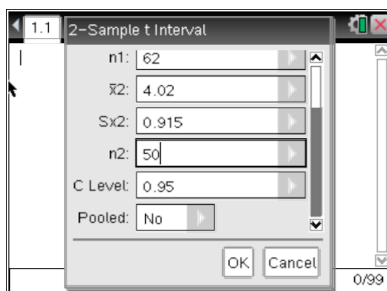
1. Home: Add Calculator: or use scratchpad 'A'



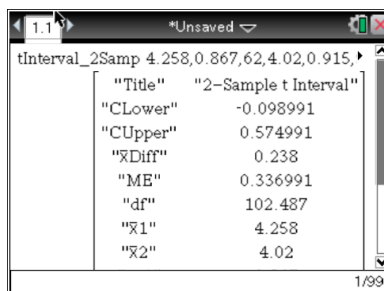
2. Menu: Statistics: Confidence Intervals: 2-Sample t Interval



3. Choose 'Stats' as Data Input Method



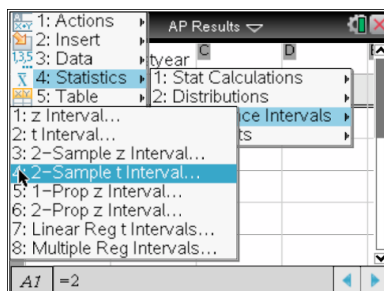
4. Enter the appropriate information for the problem



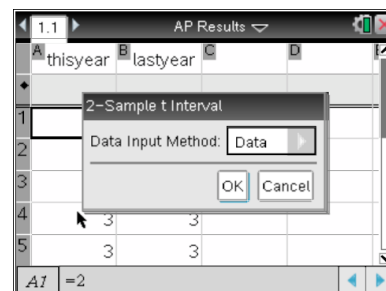
Difference of Two Means: Confidence Interval (From Original Data)



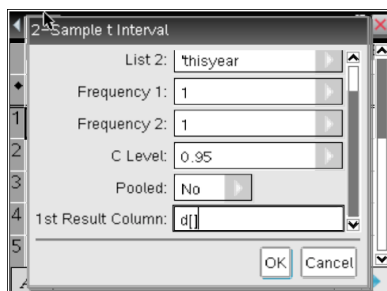
1. Home: Add Calculator: or use scratchpad 'A'



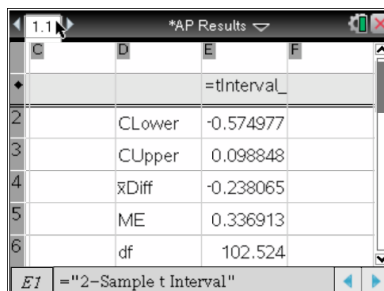
2. Menu: Statistics: Confidence Intervals: 2-Sample t Interval



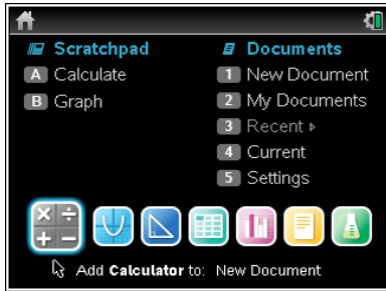
3. Choose 'Data' as Data Input Method



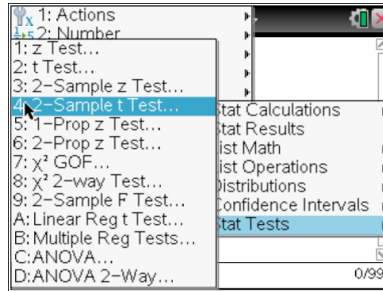
4. Enter the appropriate information for the problem



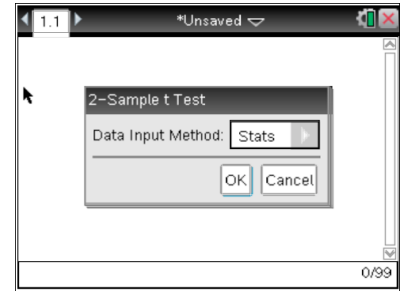
Difference of Two Means: Significance Test (Known Statistics)



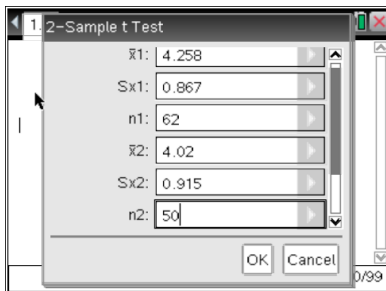
1. Home: Add Calculator: or use scratchpad 'A'



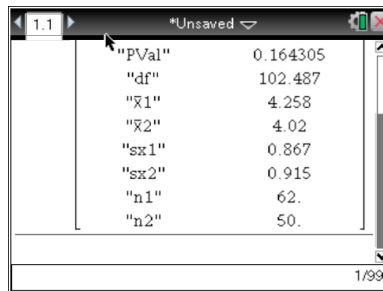
2. Menu: Statistics: Stat Tests: 2-Sample t Test



3. Choose 'stats' as Data Input Method



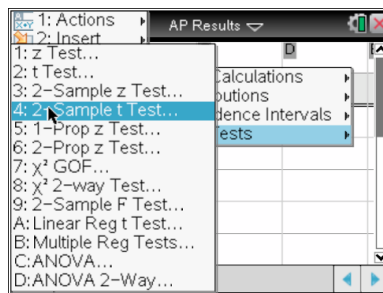
4. Enter the appropriate information for the problem



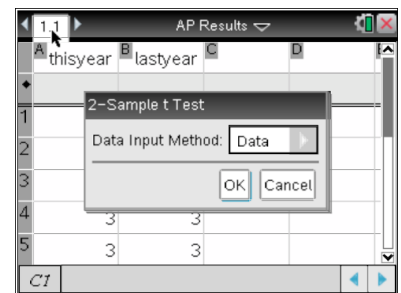
Difference of Two Means: Significance Test (From Original Data)



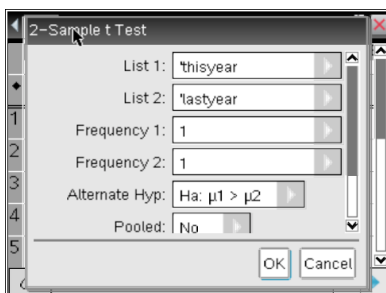
1. Home: Add Calculator: or use scratchpad 'A'



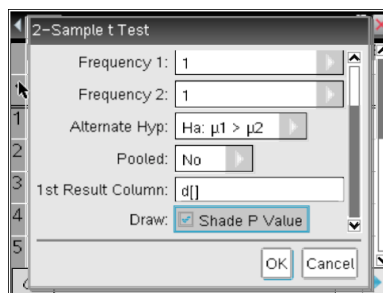
2. Menu: Statistics: Stat Tests: 2-Sample t Test



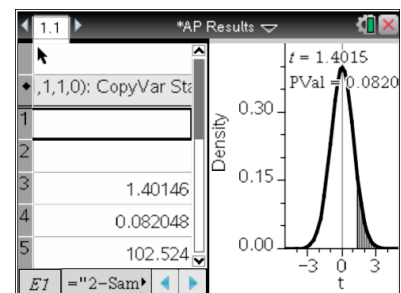
3. Choose 'Data' as Data Input Method



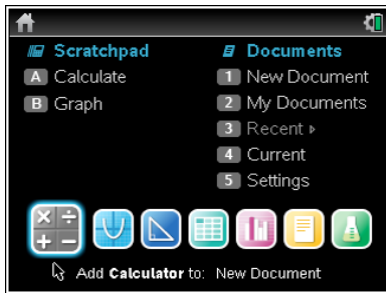
4. Enter the appropriate information for the problem



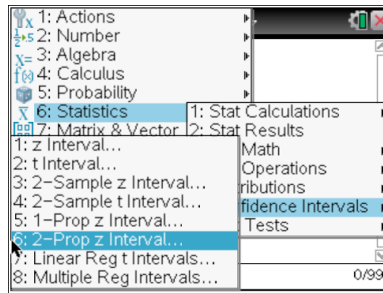
5. Click 'Shade P Value' to obtain a graph



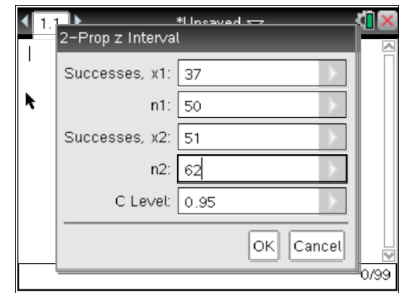
Comparing Two Proportions: Confidence Interval



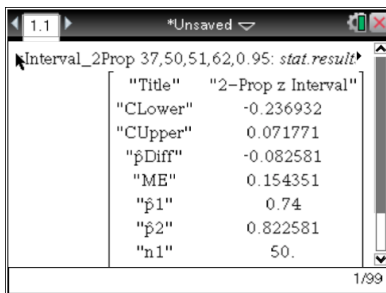
1. Home: Add Calculator: or use scratchpad 'A'



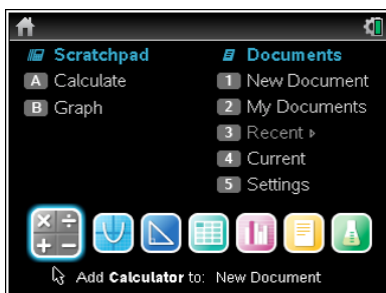
2. Menu: Statistics: Confidence Intervals: 2-Prop z Interval



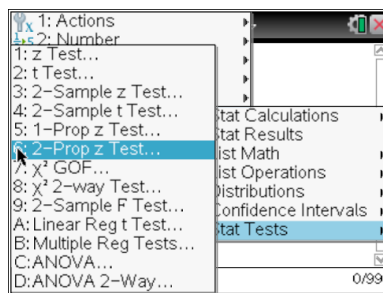
3. Enter the appropriate information for the problem



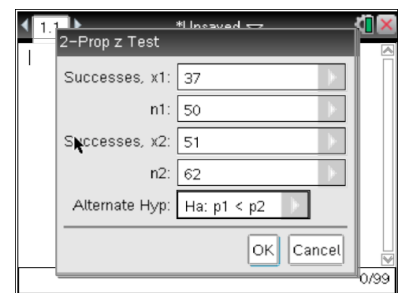
Comparing Two Proportions: Significance Test



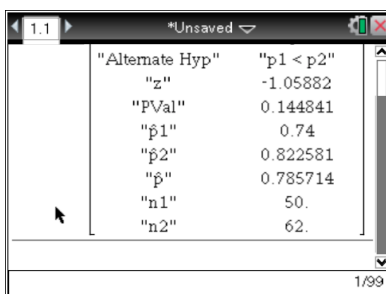
1. Home: Add Calculator: or use scratchpad 'A'



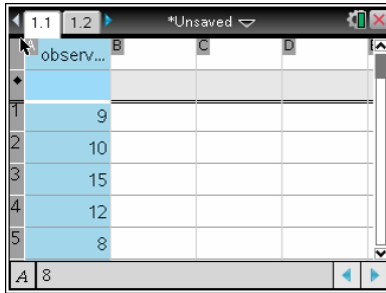
2. Menu: Statistics: Stat Tests: 2-Prop z Test



3. Enter the appropriate information for the problem




The Chi-Squared Distribution: Goodness Of Fit Test



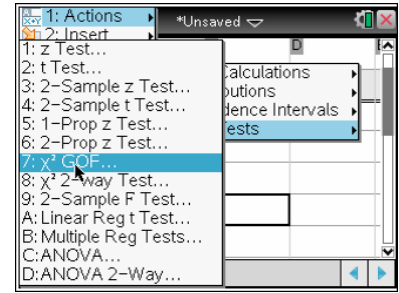
| | observed | | |
|---|----------|--|--|
| 1 | 9 | | |
| 2 | 10 | | |
| 3 | 15 | | |
| 4 | 12 | | |
| 5 | 8 | | |

1. Begin with a list of observed counts

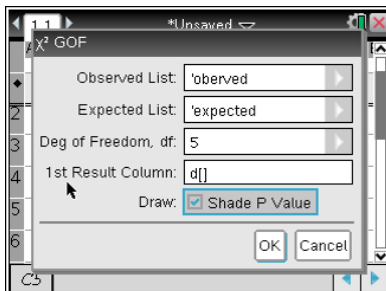


| | observed | expected | |
|---|----------|----------|--|
| 3 | 15 | 9.76 | |
| 4 | 12 | 8.54 | |
| 5 | 8 | 7.93 | |
| 6 | 7 | 7.93 | |

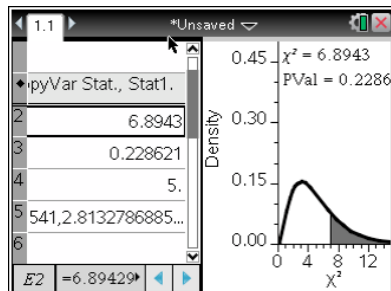
2. Calculate the expected counts and enter as a list



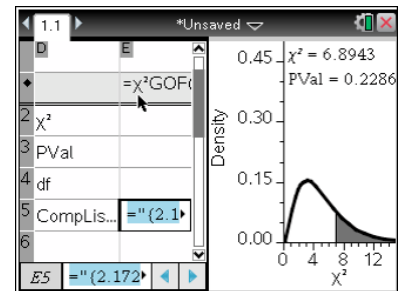
3. Menu: Statistics: Stat Tests: χ^2 GOF:



4. Enter list names, degrees of freedom. (Check 'Shade P Value' if you want obtain a graph)

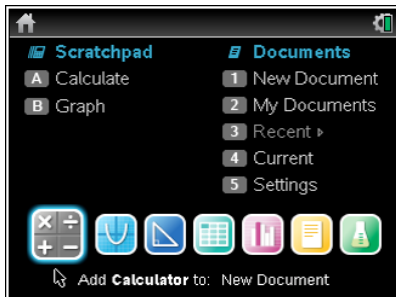


5. Scroll down results column to see χ^2 value and p-value

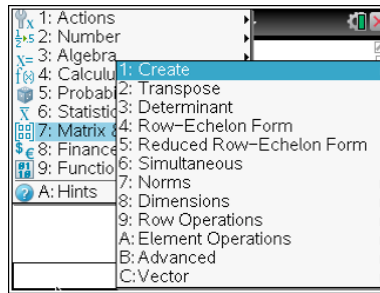


6. Scroll across the component list for 'follow-up analysis'

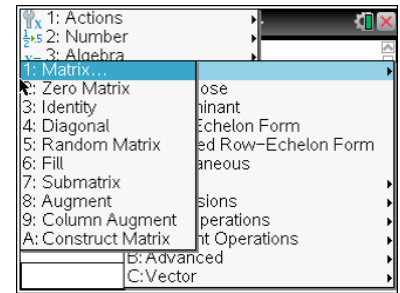
The Chi-Squared Distribution: Two-Way Table



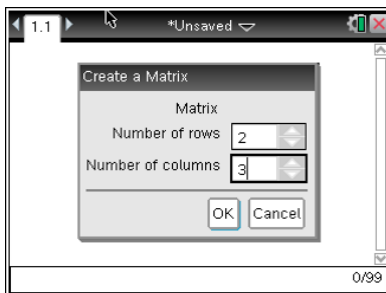
1. Home: Add Calculator: or use scratchpad 'A'



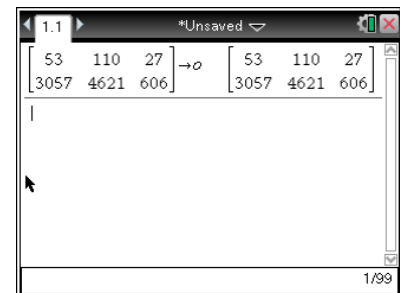
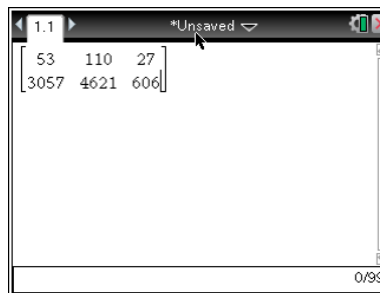
2. Menu: Matrix & Vector: Create



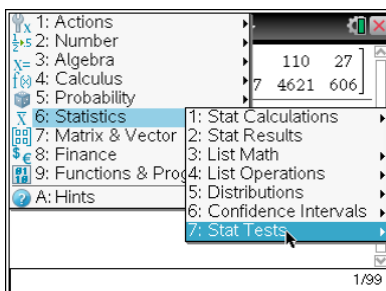
3. Matrix



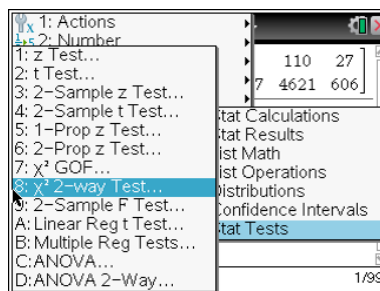
4. Enter the matrix size



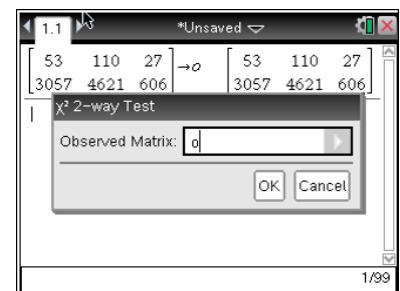
5. Sto → (Ctrl Var): 'matrix name'



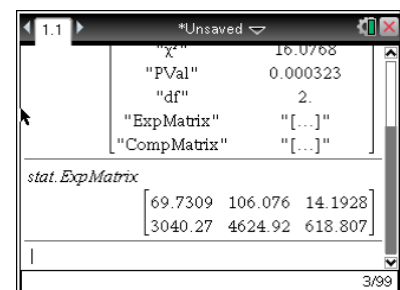
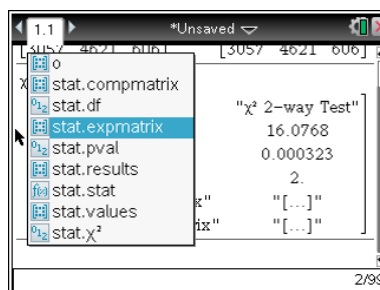
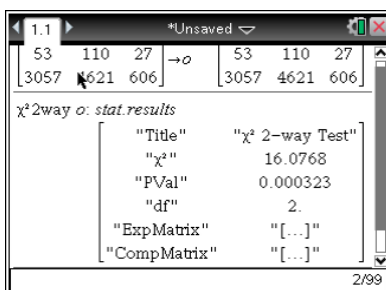
6. Menu: Statistics: Stat Tests



7. χ^2 2-way Test

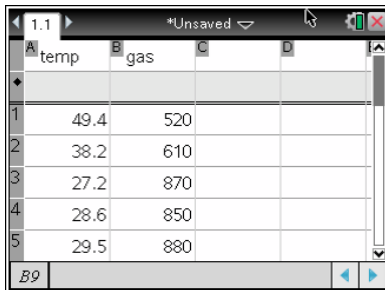


8. Enter 'matrix name'



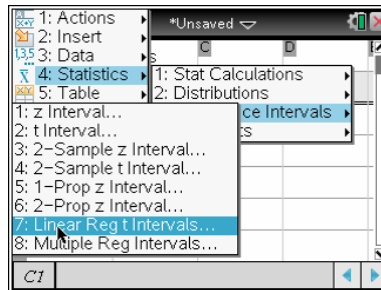
9. Var: stat.expmatrix: Enter: to obtain expected values
(Var: stat.compmatrix: to obtain components of χ^2 -test statistic for follow-up analysis)

Confidence Interval For Regression:



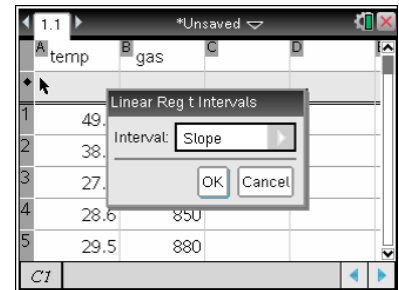
| | A temp | B gas | C |
|---|--------|-------|---|
| 1 | 49.4 | 520 | |
| 2 | 38.2 | 610 | |
| 3 | 27.2 | 870 | |
| 4 | 28.6 | 850 | |
| 5 | 29.5 | 880 | |

1. Begin with named data lists

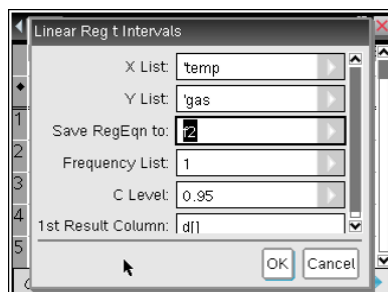


| Menu Item | Sub-menu Item |
|-------------------------------|----------------------|
| 1: Actions | |
| 2: Insert | |
| 3: Data | |
| 4: Statistics | 1: Stat Calculations |
| | 2: Distributions |
| 5: Table | |
| 6: z Interval... | |
| 7: t Interval... | |
| 8: 2-Sample z Interval... | |
| 9: 2-Sample t Interval... | |
| 10: 1-Prop z Interval... | |
| 11: 2-Prop z Interval... | |
| 12: Linear Reg t Intervals... | |
| 13: Multiple Reg Intervals... | |

2. Menu: Statistics: Confidence Intervals: Linear Reg t Intervals

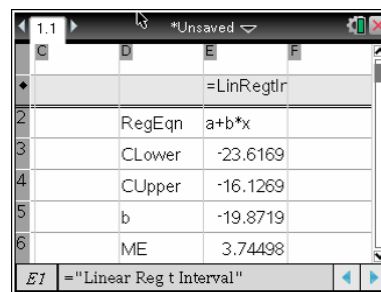


| Field | Value |
|----------|-------|
| Interval | Slope |



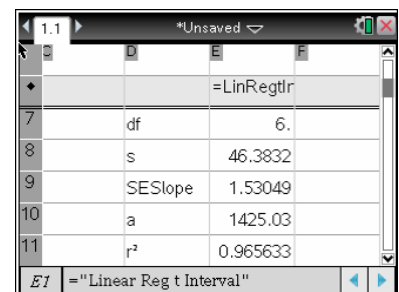
| Field | Value |
|-------------------|-------|
| X List | temp |
| Y List | gas |
| Save RegEqn to: | 2 |
| Frequency List | 1 |
| C Level | 0.95 |
| 1st Result Column | d[1] |

3. Enter the appropriate information for the problem

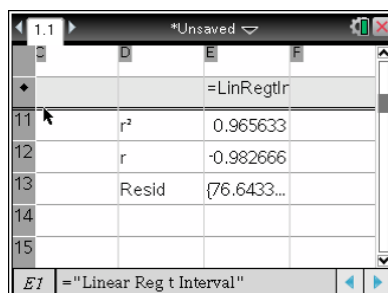


| Row | C | D | E | F |
|-----|---|---|------------|----------|
| 1 | | | | |
| 2 | | | =LinRegTlr | |
| 3 | | | RegEqn | a+b*x |
| 4 | | | CLower | -23.6169 |
| 5 | | | CUpper | -16.1269 |
| 6 | | | b | -19.8719 |
| 7 | | | ME | 3.74498 |

4. Scroll down list for further results



| Row | C | D | E | F |
|-----|---|---|------------|----------|
| 1 | | | | |
| 2 | | | =LinRegTlr | |
| 3 | | | RegEqn | a+b*x |
| 4 | | | CLower | -23.6169 |
| 5 | | | CUpper | -16.1269 |
| 6 | | | b | -19.8719 |
| 7 | | | ME | 3.74498 |
| 8 | | | df | 6. |
| 9 | | | s | 46.3832 |
| 10 | | | SESlope | 1.53049 |
| 11 | | | a | 1425.03 |
| 12 | | | r^2 | 0.965633 |



| Row | C | D | E | F |
|-----|---|---|------------|------------|
| 1 | | | | |
| 2 | | | =LinRegTlr | |
| 3 | | | RegEqn | a+b*x |
| 4 | | | CLower | -23.6169 |
| 5 | | | CUpper | -16.1269 |
| 6 | | | b | -19.8719 |
| 7 | | | ME | 3.74498 |
| 8 | | | df | 6. |
| 9 | | | s | 46.3832 |
| 10 | | | SESlope | 1.53049 |
| 11 | | | a | 1425.03 |
| 12 | | | r^2 | 0.965633 |
| 13 | | | r | -0.982666 |
| 14 | | | Resid | 76.6433... |

Significance Test For Regression:

| | temp | gas |
|---|------|-----|
| 1 | 49.4 | 520 |
| 2 | 38.2 | 610 |
| 3 | 27.2 | 870 |
| 4 | 28.6 | 850 |
| 5 | 29.5 | 880 |

1. Begin with named data lists

| | temp | gas |
|---|------|-----|
| 1 | 49.4 | 520 |
| 2 | 38.2 | 610 |
| 3 | 27.2 | 870 |
| 4 | 28.6 | 850 |
| 5 | 29.5 | 880 |

2. Menu: Statistics:
Confidence Intervals:

| | temp | gas |
|---|------|-----|
| 1 | 49.4 | 520 |
| 2 | 38.2 | 610 |
| 3 | 27.2 | 870 |
| 4 | 28.6 | 850 |
| 5 | 29.5 | 880 |

3. Linear Reg t Test

Linear Reg t Test

X List: temp

Y List: gas

Save RegEqn to: 1

Frequency List: 1

Alternate Hyp: $H_a: \beta \neq 0$

1st Result Column: c1

OK Cancel

4. Enter the appropriate information
for the problem

| | temp | gas |
|---|------|-----|
| 1 | 49.4 | 520 |
| 2 | 38.2 | 610 |
| 3 | 27.2 | 870 |
| 4 | 28.6 | 850 |
| 5 | 29.5 | 880 |

5. Scroll down list for further results

| | temp | gas |
|---|------|-----|
| 1 | 49.4 | 520 |
| 2 | 38.2 | 610 |
| 3 | 27.2 | 870 |
| 4 | 28.6 | 850 |
| 5 | 29.5 | 880 |

| | temp | gas |
|---|------|-----|
| 1 | 49.4 | 520 |
| 2 | 38.2 | 610 |
| 3 | 27.2 | 870 |
| 4 | 28.6 | 850 |
| 5 | 29.5 | 880 |

Notes...